

DATE: February 6, 2005

FILE REF: 3600/pjs

TO: Natural Resources Board

FROM: Mike Staggs, FH/4

SUBJECT: Bass Fishing Tournament Pilot Program Evaluation Plan

BACKGROUND

As part of 2003 Wisconsin Act 249, the Wisconsin Legislature required the Wisconsin Department of Natural Resources to establish a bass fishing tournament pilot program under which the department shall issue 4 permits per year. The department shall issue at least one permit per year under the pilot program for a bass fishing tournament that authorizes participants to fish for, and cull, both largemouth and smallmouth bass. The remaining permits issued will authorize participants to fish for both largemouth bass and smallmouth bass, but to cull only largemouth bass.

Act 249 specifies that each boat that participates in a pilot program tournament must be equipped with a live well that meets standards set by the department by rule.

The new legislation also requires the department to appoint an advisory committee an advisory committee for the purpose of advising the department in promulgating rules under this act, and for the purpose of advising the department in determining to whom the department shall issue pilot program permits. The advisory committee was to include fishing tournament sponsors, the conservation congress, sport fishing organizations, and users of lakes and streams in the state.

In addition, Act 249 requires the department, in cooperation with the Wisconsin Bass Federation, to conduct research and collect data for the purpose of evaluating the pilot program. The department must report its findings to the appropriate standing committees of the legislature on or before December 31, 2006.

PROGRESS TO DATE

Fishing Tournament Advisory Committee. 2003 Wisconsin Act 249 was enacted on April 13, 2004 and published on April 27, 2004. A sunset date of December 31, 2006 for the bass fishing tournament pilot program gave it immediate priority. Since the pilot program required live well standard rules and rule drafting required an advisory committee, the department established the fishing tournament advisory committee (FTAC). The FTAC membership consists of 23 members. Twelve members were appointed by specific organizations designated by the Secretary of the Department of Natural Resources to meet the requirements set forth in Act 249 (one each by the Wisconsin Conservation Congress, Wisconsin Association of Lakes, Wisconsin Council of Sport Fishing Organizations, Wisconsin BASS Federation, Muskie Clubs Alliance of

Wisconsin, Muskies Inc., Walleyes For Tomorrow, The Wisconsin Federation of Great Lakes Sport Fishing Clubs, The Wisconsin Wildlife Federation, Trout Unlimited, Wisconsin Sports Development Corporation, and Wisconsin Association of Convention and Visitors Bureaus). The remaining 11 members were appointed directly by the Secretary of the Department of Natural Resources to achieve a broad-based group that can work constructively with the Department.

Live Well Standards Rules. The first order of business for the FTAC was to work with the department to establish minimum standards for live wells. The FTAC met on August 28, 2004 in Stevens Point to discuss live well standards for boats that participate in the bass fishing tournament pilot program and finalize a recommendation to the department. With the assistance of a fantastic UW-Extension facilitator, a live well model provided by Ranger Boats, and much discussion, the FTAC made a recommendation, which the department used to draft FH-55-04. A public hearing was conducted on November 11, 2004. Based on comments from the hearing and received via the online administrative rules web site FH-55-04 was modified to extend the number of days a pilot program events may be held and clarify the minimum gallon requirement.

BASS FISHING TOURNAMENT PILOT PROGRAM

Current Wisconsin fishing regulations state that any fish taken into an angler's possession and not immediately released must be considered part of that angler's daily bag limit. Under the current format of the vast majority of bass fishing tournaments, fish are held in live wells until the end of the fishing day. They are then brought to a common location where the total number of fish per angler is weighed. Live fish are then released. Continuing to fish after reaching a bag limit is common practice and part of the strategy in bass fishing tournaments in other states where anglers are allowed to continue to fish and replace fish in their live well with larger fish.

Economic impact evaluation

Much of the impetus behind the addition of the bass fishing tournament pilot program to Act 249 was the potential economic benefit from attracting large bass tournaments which previously avoided our state due to our bag limit regulations. According to a 2001 survey conducted by the American Sportfishing Association (ASA), fishing in Wisconsin generates nearly \$2.3 billion in economic output. It ranked fifth in the nation in non-resident economic output (US \$538,397,966) and second in total number of nonresident fishing days. This survey does not provide information on local economic impacts of fishing.

During 2005-2006, four communities will be hosting bass fishing tournament pilot program events annually. The four events for 2005 have been selected. The largest event in terms of national stature is the ESPN/BASS Bassmaster Elite 50 event scheduled for June 15-18, 2005 on Lake Wissota near Chippewa Falls. We propose that an economic analysis be conducted to quantify the economic impact derived from the Lake Wissota fishery during the Elite 50 event. The proportion of total economic impact resulting from the Elite 50 tournament can then be determined. To accomplish this, we propose contracting with an economist to design and conduct the research. Similar research has been conducted to determine the economic impact of a trophy bass fishery in Texas (Chen et. al 2003). In that particular study economic impact was

estimated using expenditure data from follow-up questionnaires mailed to anglers intercepted during a creel survey and employing economic models to those data. A creel survey is currently planned by the treaty fisheries assessment team for 2006-07, providing an opportunity to conduct a similar survey as that conducted by Chen et al. (2003). In addition to the Lake Wissota economic impact study, the department will request tournament participants in all pilot events to submit expenses incurred as part of the pilot program and request similar information from other tournaments as a baseline control.

Biological impact

Several studies have been conducted during the past three decades to estimate tournament-associated mortality (Wilde 1998). Those studies report mortality as the proportion of the fish brought in by anglers to weigh in that die. Some of those studies estimated initial mortality (e.g. fish that die prior to or during the weigh in) and delayed mortality (e.g. fish that die at some point after release from stress caused by tournament handling). Few studies have examined the overall impact of tournament-associated mortality on bass populations (Allen et al 2004). There are no scientific studies that estimate mortality associated with the culling of bass. However, scientists measuring stress levels in bass caught in tournaments have shown that bass generally recover in the live well from the stress of being caught by an angler. Based on previous research, tournament associated mortality is highly variable (0 – 98%) and may be related to water temperature and weigh-in handling procedures (Wilde 1998). Over a 30-year period that included the 1970s, 1980s and 1990s tournament associated mortality declined, indicating that handling procedures for weigh-ins improved, along with live well technology. Allen et al (2004) indicated that tournament mortality could contribute substantially to overall bass mortality in waters where the ratio of tournament catch to total bass harvest is high. Despite the numerous studies of fishing tournament mortality in the scientific literature, only a few have been conducted in the northern U.S. and those have shown to have lower mortality rates (Kwak and Henry 1995; Edwards et al. 2004). The department feels that it is important to obtain estimates of mortality from the pilot program events, as expectations from the public are high.

To estimate tournament-associated mortality in the eight bass tournament pilot program events and potentially several events held under normal rules, the department recommends contracting with the University of Wisconsin-Stevens Point for a Master of Science graduate project. Under the advisement of UWSP faculty, a graduate student will estimate initial and delayed mortality of bass captured in each of the eight events. Initial mortality is simply the fish that die before they are released (e.g. before or during the weigh-in). Delayed mortality will be estimated using standard methods found in the literature (e.g. by releasing live fish after the weigh-in into holding pens in the lake).

To estimate the potential impacts of tournament-associated mortality on bass populations, a creel survey will be conducted to estimate bass harvest by general anglers on one specific lake. In addition, tournament catch reports from that same water will be used to determine the total catch by tournament anglers. The ratio of tournament catch to harvest will be used to evaluate the potential impact of tournaments on the bass population (Allen et al. 2004).

To estimate mortality associated with culling, a simulated bass fishing tournament will be conducted. Estimating culling mortality during the pilot program events would be nearly impossible due to logistics and uncontrollable variables. Utilizing volunteers from the Wisconsin Bass Federation and local bass fishing clubs, a tournament can be simulated, where anglers fish as they would during a tournament (e.g. catching and holding bass). At specified times, bass would be removed from the live well (i.e. culled) and released into holding nets and mortality measured using similar methods to those used to estimate tournament-associated mortality.

Finally, the extent of culling will be enumerated at each of the pilot program events by requesting that information from tournament participants. This information will be important in determining to what extent estimated culling mortality rates should be applied to tournaments. Not all tournament anglers cull (and most likely the majority of tournament anglers do not) because they do not catch a bag limit of bass during a given day.

Sociological impact

Fisheries management includes not only the management of fish and their habitats, but also management of those that utilize fisheries resources. The bass fishing tournament pilot program and culling in general have resulted in a great deal of controversy among various angler groups in Wisconsin. Bass tournament anglers generally feel that culling should be allowed as it is in many other states, and are favorable of having culling permitted only for bass tournaments. With modern live wells and fish holding technology, it is felt bass mortality is extremely low. Many other anglers do not feel that mortality is low. However the biggest opposition to culling by other anglers relates to fairness, feeling that no single user group should be given a privilege that all anglers cannot obtain. Given the drastically different points of view, we recommend conducting a statistically valid mail survey to obtain quantifiable data related to angler attitudes towards bass fishing tournaments, culling, and potential exemptions for tournaments. Angler attitudes between tournament and non-tournament anglers have been surveyed in Texas (Wilde et al. 1998). A similar survey could be constructed and implemented by the department.

Estimated cost

	<u>2005</u>	<u>2006</u>
Economic Impact Study (UW contract)	\$20,000	\$20,000
Biological Impact Study (UWSP contract)	\$45,000	\$45,000
Sociological Impacts	\$10,000	\$10,000
TOTAL	<u>\$75,000</u>	<u>\$75,000</u>

The estimated cost for evaluating the bass fishing tournament pilot program as presented is approximately \$75,000 per year for the next two years. The FH Bureau has been in contact with the Wisconsin Bass Federation (WBF) and ESPN/BASS regarding potential funding for the pilot program evaluation. The WBF has indicated its willingness to contribute \$5,000 to the evaluation project, along with in-kind donations of time and equipment for the simulated

tournament to estimate culling mortality and to provide data on expenditures and the extent of culling. ESPN/BASS has indicated its support to work with the department to obtain funding from outside sources, although specific sources have not yet been identified. The department will continue to work with the tournament sponsors for the pilot program events to obtain funding for the evaluation.

We propose the following for funding the pilot program:

Funding Source	FY 2005	FY 2006
Redirect funds from other DNR studies (fish)	\$15,000	\$15,000
BASS Funding	\$15,000	\$15,000
Recovered from tournament fees	\$45,000	\$45,000

The more funding we can obtain from private sources the less we need to recover from future tournament fees. Act 249 authorizes the department to promulgate rules to establish fees for fishing tournament permits. Funding the evaluation using funds obtained via permit fees is an option, but one which would require future reimbursement of pilot program expenditures covered under current budgets.